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ABSTRACT

This paper develops the idea of "the authority of experience" to explain the unease about teacher education represented in comments of 19 graduate students enrolled in a preservice physics education methods course which combined on-campus classes and teaching placements. Interviews with the student teachers after the first half of the year-long course are organized under four themes: expectations about learning to teach, observation skills, the credibility of a professor who teaches every day, and overall perspectives on teacher education. The study found that teacher education is a transition from being under authority to being in authority, and this is an uneasy transition: some students wished to be told what to do when they assume authority, and some did not; some students saw no point to classes that did not speak directly to what to do as teachers, and others found such discussions appealing; some found the professor to be authoritative because he was also teaching secondary school physics, while others found his colleagues no less credible for other reasons. The paper recommends that the authority of experience be brought to the surface so that it is not ignored by students. This can be accomplished through metaphor, life histories, narrative, and journals. (Contains 18 references.) (JDD)

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ED 362 475

THE AUTHORITY OF EXPERIENCE IN LEARNING TO TEACH: MESSAGES FROM A PHYSICS METHODS CLASS[1]

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Introduction

This paper reports on developments in our continuing research on experiences of learning to teach. Although both of us had been engaged in related work earlier, the current research program began formally in 1984 when we deliberately adopted Schön's (1983, 1987) epistemology of practice. For us, Schön's distinctive "reflection-in-action" and its attendant epistemology, although all too frequently misrepresented and misunderstood (Munby & Russell, in press) appeared to offer a fresh perspective for understanding how experience "teaches." Our early case studies (e.g. Russell, 1988) sought to explore reflection-in-action and reframing, both to subject Schön's account to the hard edge of experience and to determine its power for interpreting the experience of those who are learning to teach. Later we investigated selected influences on reframing, such as subject matter and the institution of school (e.g. Munby & Russell, 1992). Most recently, we have turned the research toward teacher education directly. Here we are asking what steps can be taken in preservice education to help beginning teachers become better able to learn from experience.

The principal idea advanced in this paper is "the authority of experience." This is developed by considering messages from students enrolled in a preservice education program, the relevant details of which are described immediately below. Following the the presentation of the messages themselves, the paper develops the idea of the authority of experience for explaining the unease about teacher education that is represented in the messages. The paper concludes with a brief account of approaches to teacher education that are suggested by the authority of experience.

The Setting

The setting for exploring the idea "the authority of experience" is the one-year Bachelor of Education program at Queen's University. Following the prevalent pattern in Ontario, the students already possess an undergraduate degree. The program consists of 20 weeks of "on-campus classes" interspersed with nine weeks of practice teaching, arranged in blocks of two and three weeks. Forty percent of program credits are devoted to "curriculum" courses (or, as in our title, courses on "methods" of teaching a particular subject); for the student teachers

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discussed here, these are two full-year courses on the teaching of physics and mathematics. Thirty percent of program credits are devoted to three half-year "foundation" courses in psychology, history and philosophy, and educational contexts. Ten percent of the program is given to a "skills" course addressing general topics from use of media to curriculum design, and another ten percent is a half-year "special studies" course that can range from computer applications to outdoor and experiential education. Finally, the nine weeks of practice teaching are assigned the remaining ten percent of program credit.

Tom Russell's teaching assignment regularly includes a physics methods (or "curriculum") course within this Bachelor of Education program. (For convenience, we refer to this course by its numerical designation, 351.) In 1992-93, the class included 19 students, about half with undergraduate degrees in various fields of engineering and about half with at least three or four years experience since completing their first degree. In the 1990-91 academic year, Tom returned to the physics classroom after an absence of many years by assuming responsibility for a grade 12 physics course at a local secondary school. This is a "semester" course, running from the beginning of September to the end of January, with classes meeting each day for 76 minutes. Tom repeated the arrangement in the 1992-93 academic year.

There were many purposes for Tom's "return to the physics classroom," in an arrangement that involved the teacher who would otherwise teach the Grade 12 course coming to Queen's once each week for one of the two two-hour classes in the 351 course. The immediate goals including reminding himself of the nature of the work for which he was preparing others and even proving to himself that he could still teach at the secondary level. A more pervasive goal was to explore ways to build links between the 351 course and the daily teaching in the secondary school, by arrangements such as having the preservice teachers observe his teaching of the Grade 12 students. A stronger sense of partnership with teachers in the school's science department would also be a valuable result of the "exchange" arrangement. In the context of our continuing research on the development of teachers' professional knowledge, the linkage between school and university programs in the form of his simultaneous teaching in both contexts created an additional and unusual opportunity to explore Schön's perspective on the development of professional knowledge. While the school physics class was an opportunity to directly and personally re-visit the experience of learning to teach, the arrangement also introduced new elements into the 351 course and created an opportunity to re-think the place of that course in the Bachelor of Education program.

It is important to note that the 351 component of our research in 1992-93 has deliberately avoided assessing the effectiveness of particular instructional strategies. Instead, we elected to collect and analyze data to see what understandings it gave us about the process of learning to teach, from our personal perspectives as teacher educators, from Schön's epistemological perspective, from an institutional perspective, and from the perspectives of the 351 students themselves. Tom took the role of teacher in both courses, while Hugh Munby, as research partner, served as listening post and occasional observer of both courses. We find that a powerful illustration of the approach to this year's work is revealed by juxtaposing two quotations.

> In 1991-92, the first year of Tom's teaching in two contexts, one of his 351 students wrote in her "story" of the year's B.Ed. experience a memorable comment about the impact of his teaching the Grade 12 physics course: "It's interesting that the only person who is not telling us how to teach is the person who is teaching every day in a school."
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> In Valli's (1992) collection on reflective teacher education, Calderhead observes, "Surprisingly, teacher education programs seem rarely to be influenced, to any

substantial extent, by an understanding of how student teachers learn to teach" (p. 139).

The Messages

The data we report and interpret here come from the students in the 351 course. They began their program with five weeks of on-campus courses to prepare them for a first teaching placement of three weeks in late October. A return to Queen's for two weeks was followed by two more weeks in a school (teaching the subject not taught in October) and a final two weeks on campus before the end of the fall term. As might be expected the experience of moving every two weeks left many students weary as they rushed to complete fall term assignments. During the nine weeks on campus, one of the two two-hour classes each week was held in Tom's physics classroom in the school, where he had just finished teaching the Grade 12 class. This was intended to (and did) make it easier for the new teachers to observe Tom's teaching. At the end of term the student teachers completed a free-response "strengths, weaknesses, suggestions" questionnaire to elicit their impressions of the first half of the 351 course. Then, during January, Tom scheduled a 30-minute interview with each student and during this time asked permission to tape record comments about their reactions to his teaching in both settings. Most 351 students agreed to being recorded on the conditions that their statements would be used anonymously and that they would receive a copy of any paper using their statements. The interview statements are organized under four themes: expectations about learning to teach, observation skills, the credibility of a professor who teaches ever day, and overall perspectives on teacher education.

Expectations about Learning to Teach

Tom had two broad strategies for the first term's work with the students in 351. One involved calling their attention, early and frequently, to their assumptions about teacher education, in hopes that this would start to move them to new ways of thinking about what they were learning. The other involved having them meet him for one class each week at the school in the classroom where he had just finished teaching. The hope was that being in a school in a physics classroom, where they may have just watched Tom's lesson, would provide a context for more meaningful and practical discussion of issues related to the teaching of science. Tom also assumed that his partner from the school would, in his weekly class, address most of the "technical details" that the 351 students would "expect" in a course of this type.

Neither of Tom's strategies seems to have been as successful as he hoped. As the following comments about learning to teach suggest, the transition to new ways of thinking about their own learning really seemed to begin only in January, half way through the program. Expectations persist around such familiar themes as "we will learn best while practice teaching." There are predictable references to matters "technical," "mechanical," and "more concrete" which we take to be polite requests for more "tell us exactly how we are supposed to teach." There are references to the adjustment required by teacher education courses, which are so unlike other university courses.

Matt: I think the experience with the practice teaching was very valuable. I think that's where we learn the majority of what there is to learn, in my opinion anyway, through experience, and I wish there were more weeks of practice teaching through the year because that's where it's at.

Mary: I don't know whether [thinking about the program over Christmas] changed my sense of learning, about what learning to teach means, but it changed my sense of what a teacher does.

[Tom: How so?] Well, I think we all come through the system thinking that a teacher's life is not necessarily easy but there *is* sort of a framework out there—"This is what you teach and this is how you do it."—but that you get a greater understanding of what is actually involved in putting together a teacher, in a sense, and the fact that, once you are a teacher, you still are going to be learning as you go along how to be a teacher and how to get ideas across to students and how to discuss things with students. So I think it's been an eye-opening experience from the point of view of what a teacher's life is all about, and what being a teacher is all about. So I guess in a sense that's what teacher education is.

Mary: [about starting next September] Sure, you've now had a little bit of experience. You've some further knowledge about what it is to be a teacher or how to be a teacher, but you're not actually going to learn to be a teacher, I don't think, until you've done it. And you'll look back on it two or three years later and say, "O.K. Now I think I know what a teacher is."

Al: I think generally, as with anything you're learning, most of it comes from experience. I think you learn by doing. And that goes right back to *my* history and working in the trades. Another comment I have which is specific about our physics class is that I think a lot of people were looking for something more concrete, and perhaps an approach would be to provide some of that initially in September or October or even—however much of the fall term—so that you've answered that need, and you've made them comfortable—prepared or felt comfortable to go out to teach. And then, at this stage, now we're starting into the winter term or wherever it falls, would be time to make a switch and talk more philosophically.

Bill: The first three weeks teaching was really when I really started to learn about teaching. Because, you know, all the build-up to that didn't really mean anything to me before I got out there and experienced it. And so after that it was easier to relate to problems in the classroom or teaching methods.

Fred: I really didn't have much of a concept before we started the class. I've really come to appreciate that I'm going to have to explore and develop my own style. And this all ties in with "We can't show you or teach you how to teach....We can give some suggestions and point the way to how you can get to the kind of teacher you are to become."

Joe: I honestly thought it was going to be a lot more on the mechanical side....I'm slowly starting to get the hang of what's going on around here, but when you get a preconceived notion of what things are going to be, it's awfully hard...well, first of all it takes you X number of days to figure out that's not what's going on...I was expecting it to be a little more concrete....I'm still trying to figure out how to get the most out of physics class. I mean in math class it's easy to sort of figure out..."today we're doing worksheets."...Instead of having things sort of given to you, you have to *get* them is physics. Whereas in math class it's, in a lot of cases anyway, sort of given to you....Early on last semester...I hadn't yet figured out that we weren't just going to sit here and have things spoonfed to us....There's a great conception out there that people think teachers' college is nothing. And you go to teachers' college and if you go in, you get out, which is probably true, but depending on what your attitude is in the meantime is going to depend on what you get out of it.

Faith: I didn't really think this way previously in education, but it seems I'm only doing this for myself right now. That I don't see you as being an evaluator of my work so much as someone out there with ideas to pass on.

Observation Skills

People entering a teacher education program have attended thousands of individual lessons and so observing teaching is not new, but observing as a teacher candidate and without pressures to learn specific content are quite new. The 351 students would observe, and observing would be interesting most of the time, but they did not know how to record notes, questions, or even what they were observing. They reacted very positively to the weekly classes in the school before their first teaching placement, because the class was getting them inside a school and reminding them of the setting they would soon enter. Later, some began to resent the 10-minute trip to the school, perhaps because the novelty had worn off, perhaps because there were so many assignments coming due as the term ended. The in-school location was successful to some degree, but not overwhelmingly or at all times. Most teacher educators have observed so many lessons by student teachers that knowing what to observe comes naturally. These comments remind us how very different it is to observe as someone just beginning a teaching career. Not only is specific training for observation needed; they also need significant periods of time to adjust to the new perspective on what happens in classrooms. The ability of the 351 students to ask questions of general interest about what Tom was doing in the Grade 12 physics lessons developed much more slowly than Tom anticipated.

Don: Having that connection with the school was particularly good. Disadvantages, I guess, from the student viewpoint, would just be that we couldn't get a hold of you in the afternoon. But that wasn't usually a problem because you were almost always here in the morning so people could get you if they wanted just by waiting till the next day. So, I don't think—the disadvantages were probably more on your part with the time commitments. But being able to—I know some people didn't like having to go all the way out to your school—it didn't matter to me....I tend to think of it as such a ridiculously small distance that I was actually surprised when somebody went so far as to complain about it.

Don: To be honest, *after* the first teaching round I didn't feel the need or the desire to go out as much and watch a lot of classes because I'd just been doing that. During the last week of my teaching round I did a lot of wandering around and watching classes.

Mark: I think your class in the school sort of lost its impact after the first month and a half, maybe two months. It was a great stepping-stone—excellent, really—gradually working in, being able to view a class without having to go through the nerves of asking a teacher in a high school, and then seeing and discussing a class. The possibilities of tutoring and all that didn't really materialize because people seemed to be bombarded with assignments. And then, you being the door to seeing other teachers...great.

Hope: I think it's good in that it opens up that school for us. It gives us an avenue where it's easy for us to go and see a class in action before we go out on our first placement rounds, so in that way it's very useful.

Paul: That was one of the best parts because you could go out there and *see* the class. You could also just see the school, be in the surroundings so...it becomes more immediate. You know—you realize that "This is what I'm going to be involved in. This is where I'm going to be in a year." So that impacts what you're saying a bit more, and the other side, I think, was just the fact that you've a lot more experience, like, you're more in touch with what's actually going on, instead of having a lot of theories that are well and good and required for movement forward in education, but always have to be tempered with the reality of the situation. Certain things may be theoretical and ideal, but we're dealing with real systems which *aren't* ideal, and it gives you a lot more, I think, depth in your teaching.

Fred: If I go and see some of your future classes, I think I'll be more attentive at taking, making some notes to myself as you go along. The last couple of classes I watched, I simply sat at the back and watched. And I had some ideas but I didn't jot them down.

Ron: Before the first [practice] teaching round it gave us a chance to go out and [see] what it was like in a classroom, which I thought was great.

Matt: It gave us the opportunity to see what was happening in a science class before we actually got in the field ourselves. It gave us another opportunity to see how you, as a teacher, handle situations in class.

Credibility

Teaching a class every day gave Tom an element of credibility that is not otherwise granted to professors of education. The following comments on this aspect have a positive tone. The anecdotes from classes, the details about individual students over time, the frustrations with results of quizzes and tests, and technical details ranging from parents' night to managing marks were all interesting and relevant. Yet there remains for Tom a sense that these aspects were not as interesting and relevant as he hoped because the 351 students were still too new to the details of the work of a teacher. Nor did these aspects of the course compensate for the more expected features of lesson planning and detailed topic and unit analysis that might otherwise have received more time in the course.

Bill: I think the fact that you can tell us what you've done in class and how the kids are reacting and how the parents are reacting is something that I'm not getting in my other classes because none of my other profs are teaching at the moment.

Mark: But I have also expressed to you before that it shows the proper direction for, if possible for a prof, an education prof, to be teaching in a high school. How else do you know what it really *is* like today, and to teach exactly what's going on? How do you teach? "Well, I'm teaching in a high school as well, so I know." So, what a great opportunity that's been, and it certainly is admirable for you to do that.

Fred: Just on the point of credibility—some of these teachers at the Faculty of Education haven't taught in a high school for 15 or 20 years.

Joe: There is some concrete evidence that you're teaching. I mean, there's things like stories that you bring into our classes on Wednesdays in here that I think are very valuable to just sort of getting an experience. It's not really a tangible thing that we get from it...you just sort of get a feel for what's going on....I mean you sort of come across as...more believable. Not that I don't *believe* other profs.

Teacher Education

The interview statements that follow give a broader sense of overall expectations of teacher education (including the absence of expectations!). Individual reactions come more clearly to the surface here, as there are complaints about repetition and overlap among courses, the absence of an overall perspective to bring many courses together (since "integration" is left to the individual student), and frustration with the pass-fail marking scheme being experienced for the first time. The 351 students know that they will be teachers next year, but on campus this year,

they are still students, or they have returned to the student role, and the student role brings with it certain attitudes and behaviors and rules out "rocking the boat." Students always hope for the best but feel they cannot or should not be expected to take responsibility for making it happen.

Mark: [Tom: What about the shock of going back into being treated like a student again after several years in industry?] Yeah, you tend to think, "Well, jeez, am I in high school again here?" Like, the regulations over at the residence would be one, but I know that's not your concern. But, yeah. It's been fairly relaxed, though—you can sense with assignments it's sort of understood that you're going to do a professional job. At least that's the feeling you get from a prof when he assigns some piece of work. But still some people are sliding back to, "Well, I'll hand it in a little late." I'm always surprised people hand things in late. And just the attitude, "Well, maybe I'll even skip a class." You know, that's really something, when you've been in the professional world for a while. So it *has* been quite a different approach; I think it's a more mature professional approach. It's funny how it slips back to the old university style among the students. The fact that "Oh maybe I'll skip a class today" or "Maybe I won't hand this assignment in on time."

Paul: If an institution puts money or staff where something is important, then I think the students start to see it's something that *is* important and worthy....The Faculty of Education hasn't really thought out—they don't have an overall focus of what teacher education is supposed to be, or it's very willy-nilly. They're trying to cover all the bases but they're not worrying about the game.

Hope: I think most people feel comfortable with Honours/Pass/Fail or just Pass/Fail for the same reason that most people are comfortable with doing as little work as is necessary to get the paperwork. But for me, I don't like it. It's belittling our education. It's belittling the teaching profession, I think. You get hardly any assignments, you're not required to do a heck of a lot. It's just all you're required to do is *be* here, and you'll get your degree and you'll get your job. I don't think you can ever consider that teachers will get professionalized or be considered as professional when teacher education is so trivial.

Hope: It just depends on what your view of this year *is*. I mean, do a lot of people think that you can only really learn by actually teaching, so then any time that we're actually spending here in classes is just like a filler? It's another hurdle that you have to jump in order to be certified.

Bill: A lot of the time I don't know why I have to go to classes here. It doesn't seem to relate to teaching in a classroom. Some specific classes are teaching something that's really interesting, and I appreciate that and that's great. And sometimes I go to class and I'm not interested in what's going on, and I don't see how it could possibly help me when I go to teach it.

Don: I don't think I had any presumptions about what [teacher education] would be like, I was ready to take it as it came. Almost every teacher I had kept saying, "By the end of the year, things are going to look different, you're going to think different than you do now." And I don't think I really do.

Don: I got so frustrated there just before Christmas...that I wrote out...*my* idea of how teachers' college should be....I was just so *sick* of all these classes. To be honest, so many of them end up being so similar, and you end up feeling that you are taking three classes that are all the same. Like all my foundations classes; they've all ended up having the same feel to them. They've all been, like, big discussion classes....The curriculum classes were usually more nuts and bolts. [Tom: And is that where you'd like to see them?] It's nice to get a variety, and that's—I know you [Tom] tend to want to promote thinking about your teaching, and I have no problem with that, but I want something of everything.

Al: In a lot of these issues I don't think that there is any answer or absolute, and I think that's what most people should take out of this program is that, if you come in thinking you're going to get an answer, you're going to be shown *the* way, I think that perhaps that's the main change people will go through—perhaps they'll go through with it—they'll realize that that isn't available in education. You can't say "You have this situation: you do this." There's not a viable or voluminous book of action/reaction to this situation. It's how *you*, the individual teacher deals with people; it's their own personality, it's the students' personalities. So I think that most of it is really dependent on experience and interactions with other people....In that setting, I think, as the authority figure in the classroom, most people don't have a lot of experience. I don't think that's something they can get from sitting on the other side in a classroom and listening to somebody else discussing.

Al: In the curriculum in the math course, it is somewhat more catering to what some people are asking for: "I want some information. I want to be taught to teach." And I think that's valuable. I think it makes the students feel more comfortable and, as I said before, it exposes you to different ideas and ways of approaching things. Because math has its reputation—it's probably very justified—that it's very dull, dry, boring, and nobody likes it or understands it. It's too abstract, and all these problems. So it's a big concern and you've got to liven it up and make it different and interesting and relevant and all these wonderful things. So, to get some ideas how to do that because, left on your own, you wouldn't really—most people wouldn't come up with very much. So if there's somebody who has some suggestions, at least it sparks some ideas....It's just exposing us to different approaches and I think that's valuable because, as I say, most people wouldn't have the creativity to come up with these ideas on their own, and they don't have the time or the direction, I guess, to find the resources.

Mary: The comments I've been hearing a lot are, "I'm expecting to be told *how* to be a teacher." I'm expecting that to a certain extent too, but it seems like—I'm almost afraid for them when they go out and start teaching and have to hang on to everything by themselves?

Matt: Our [physics] class opens a lot of discussion, which is good, and I like to hear what other people have to say, and their ideas on topics. And it kind of helps me form how I feel, and sometimes what I feel is changed, after hearing other people's arguments. And you get to see the different sides of things, and that's good, so I appreciate that.

Authority and Experience

Striking features of these data include the variety of the beliefs expressed and the strength with which they seem to be held: the students are either dismayed at the lack of specific information in Tom's course about how to teach (while welcoming it in other courses), or they are bewildered by their classmates' high need for certainty; the students either decry the opportunities to discuss issues in philosophy and sociology courses or they welcome them. Undoubtedly the diversity and conflict represented in these views are familiar to all teacher educators. But their familiarity takes on a more ominous tone when we consider Pajares' (1992) review of research knowledge about beliefs. Pajares summarizes this knowledge in a set of "fundamental assumptions that can be reasonably made" (p. 324), some of which we find particularly disturbing for teacher educators:

> Beliefs about teaching are well established by the time a student gets to college.
>
> The earlier a belief is incorporated into the belief structure, the more difficult it is to alter.

> Individuals develop a belief system that houses all beliefs acquired through the process of cultural transmission.
>
> Belief change during adulthood is a relatively rare phenomenon, the most common cause being a conversion from one authority to another or a gestalt shift. (pp. 325-326)

Many (e.g., Richert, 1992) have observed that preservice students have witnessed teaching for thousands of hours, so we can expect that they have well developed beliefs about what teachers do and thus about what teacher education programs should accomplish. Beliefs about teaching are going to be difficult to alter because they are acquired early and are persistently reinforced. Next, we note that the power of school for transmitting culture must not be underestimated: schools transmit beliefs about teaching and about the correctness of these beliefs. Finally, the authority within teacher education courses is likely to be no different from that previously experienced: it's the authority of the text and of the position of the person at the front. There is no explicit change in authority within the coursework of teacher education programs. Pajares' "reasonable assumption" about the place of authority in belief change suggests to us the importance of exploring authority in teacher education.

The authority familiar to students entering teacher education is the authority they have been subjected to: it's the authority that has told them what to do and what to believe. The authority these same individuals expect to experience when they become teachers is the authority they have seen their teachers wield. In this light, teacher education looks like a transition from being under authority to being in authority. The data suggest that this is an uneasy transition: there are students in 351 who evidently wish to be told what to do when they assume authority, and there are some who don't; there are students who see no point to classes that don't speak directly to what to do, and others who find discussions appealing; there are some who find Tom to be credible (authoritative) because he was teaching secondary-school physics while teaching 351; and there are others who find Tom's colleagues no less credible for other reasons.

The Authority of Experience

The above account has omitted a form of authority that may explain some of the disenchantment we read in the messages from 351. Our interest in exploring Schön's (1983, 1987, 1991) epistemology of experience continues to be driven by its potential for explaining the knowledge that resides in action and how this might be acquired. This knowledge-in-action is the knowledge that allows experts to perform, and it can't be put into words. We find it helpful to connect the concept of knowledge-in-action to authority, and to suggest that the "authority of experience" is a useful concept for explaining the tensions in teacher education that are evident in the messages from Tom's 351 students.

We introduce the term "the authority of experience" because of our concern that learning from experience is never mastered, during preservice programs, in a way that gives direct access to the nature of the authority of experience. If Schön is correct that there is a knowledge-in-action that cannot be fully expressed in propositions and that learning from experience has its own epistemology, then our concern is that learning from experience is never clearly contrasted with learning that can be expressed and conveyed in propositions.

In their many years of schooling preservice teachers have seen two basic concepts of authority at work: the authority of reason, and the authority of position. The goal of education can be cast in terms of establishing knowledge claims on the authority of reason, but there are

times when claims are seen to rest on the teacher's authority of position (Russell, 1983). Preservice teachers are poised to move from being subject to their own teachers' authority of position to taking charge and, as students turned teachers, assuming authority of position over those they teach.

Unfortunately, school's preoccupation with the authority of reason and of position can cause teachers and students to ignore a type of authority that lies at the heart of action and performance: the authority of experience. Emphasizing the contrast between school knowledge and action knowledge (Barnes, 1976) marks how the experience of school can conceal the differences between the authority of reason and other forms of authority.

The explanatory potential of "the authority of experience" can be seen in the predicament of experienced teachers who are appointed to faculties and colleges of education. Their knowledge-in-action gives them the authority of experience. But the circumstances of telling their students about teaching unavoidably commits them to the authority of being in charge, and their students are automatically placed under authority. The authority of experience gets transformed into the authority that says, "I know because I have been there, and so you should listen." The authority of experience simply does not transfer because it resides in having the experience. This coincides with Schön's view that knowledge-in-action cannot be transformed into propositions. It is for this reason that Schön (1984) cautions those who wish to acquire professional competence, "there is something you need to know but your teachers cannot tell you what it is."

Experience in the role of teacher is what is new and exciting for preservice teachers, but their opportunities to learn the authority of that experience are hampered in a fundamental way by their being subject to observation by cooperating teachers and by representatives of the university. Those observers are in positions of authority with respect to student teachers, and so their comments are likely to be interpreted as having authority of position and of someone else's experience, not of the personal experience of the student teacher. Thus the potential of the practicum to be a forum for beginning to understand and interpret the authority of experience is restricted and undermined.

Once on the job, the beginning teacher readily acquires experience but still may not come to understand the process of learning *from* experience or to recognize fully the authority of experience. There is a competing authority in conversations long and short with other teachers in the school, conversations that express perspectives and practices shared by many teachers in the school. This competing authority may restrict the ability of the beginning teacher to listen to personal experience, including responses of students. Other teachers' practical knowledge has an obvious "authority of experience" but it is expressed in words and propositions that are most readily associated with "authority of position"—in this instance the position of having more experience.

Thus we are not at all surprised that the 351 students show little insight into the nature of what they might be learning from experience during practice teaching. They are *having* teaching experiences, and they are *hearing* the words of experienced teachers in relation to their teaching experiences. But there is little sense of an awareness of the unique nature of *learning from experience*. Instead there are tensions associated with not hearing enough propositions about teaching (the medium they associate with learning), with credibility in terms of recent teaching experience, with not knowing what to make of observation experiences, and with confusion about the nature of teacher education. In the absence of any clear delineation of the epistemology of practice and the nature of the authority of experience, they understandably look for the familiar and trusted authority of position and reason associated with propositional knowledge rooted in the experience of those who have been successful teachers.

As Kagan and Tippins (1992) remind us, the expert-novice studies have identified a range of differences between beginning and experienced teachers. Their study of preservice and inservice teachers' observations of videotaped lessons showed quite clearly the difference that experience makes:

> Notes taken while viewing the videotaped lessons indicated that the inservice teachers were able to render spontaneous functional interpretations of teacher behaviors, often ignoring the specifics of the behavior itself and citing only the underlying purpose. In this sense, the notes taken by inservice teachers suggested a "deep" reading of teacher performance. In contrast, the preservice teachers invariably described specific teacher behaviors and only occasionally noted their functions. This suggests a "surface" reading of teacher performance. (pp. 156-157)

Conclusions such as these are plausible in the light of the messages from the 351 students about observing lessons and interpreting the teacher education program. Experience *does* make a difference, but the nature of the authority of experience does not become evident automatically to those who have experience. As those with experience sense when they try to "share" their experience with beginners, words go only part way and the beginners must also have further experience. What the expert-novice studies have not done is shown how those with experience come to understand (if at all) the nature of the authority of that experience, particularly in relation to the authority of well-argued written or spoken accounts of experience. Listening to one's own experience is *not* the same as listening to the experience of others, and the 351 students seem to indicate that they still place much more authority with those who have experience and with those who speak with confidence about how teaching should be done. They seem reluctant to listen to or to trust their own experiences as an authoritative source of knowledge about teaching, and we wonder how and to what extent they will begin to hear the voice of their own experiences as they begin their teaching careers.

For us, the basic tension in teacher education derives from preservice students wanting to move from being under authority to being in authority, without appreciating the potential that the authority of experience can give to their learning to teach. The challenge for teacher education is to help new teachers recognize and identify the place and function of the authority of experience. If this is not done, the authority of experience can fall victim to the danger that accompanies all versions of authority: mere possession is not enough because authority can be abused.

351 and the Authority of Experience

The messages from 351 have prompted us to look seriously at Pajares' (1992) review of work on beliefs, and to explore the issue of authority. When this analysis is joined with Schön's (1983) epistemology of practice, the idea of the authority of experience is compelling. It suggests to us that we might reconsider the work of 351 in terms of three types of authority. That is, the effort can be made to bring the authority of experience to the surface so that it is not ignored by the students as they move from being told to being in charge.

Something of the importance of giving explicit attention to the authority of experience is evident in the work of Bullough, Knowles, and Crow (1991). When they attend to the messages in their own case studies, they come to see the need for preservice teachers:

> to be helped to become simultaneously students and architects of their own professional development. They need assistance to develop frameworks for thinking

> contextually and reflectively about their development; they need to become students of schooling and those aspects of institutional life, school practice, and interpersonal relations that are likely to enable or inhibit their development as professionals. (pp. 189-190)

Bullough et al.'s approach is to incorporate many of the tools used in research on becoming a teacher into teacher education itself: metaphor, life histories, narrative, and journals. We agree because we see such approaches as having power for putting students in touch with the concept of the authority of experience. Once sensitive to what the authority of experience has to offer, students have a chance to use it to listen to what their own teaching and their own students are saying about their teaching. Unless one recognizes the authority of experience, messages like those from 351 are unlikely to be turned back into improved practice.

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